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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,405	07/17/2006	Risto Siliqi	1043113	1906
64304 7590 02/18/2010 STRASBURGER & PRICE, LLP ATTN: IP SECTION 1401 MCKINNEY SUITE 2200 HOUSTON, TX 77010				
EXAMINER HUGHES, SCOTT A				
ART UNIT 3663		PAPER NUMBER		
MAIL DATE 02/18/2010		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/565,405

Applicant(s)

SILIQI, RISTO

Examiner

SCOTT A. HUGHES

Art Unit

3663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) 15-19, 24 and 36-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 23, 25-35 and 40-51 is/are rejected.
- 7) ☒ Claim(s) 15-19, 24, 36-39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Prior Person's Patent Drawing Review (PTO-544)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/2/2010 has been entered.

Response to Arguments

Applicant's arguments and amendments filed 2/2/2010 have been fully considered but they are not persuasive.

Applicant argues that claim 1 has been amended to specify that the seismic traces are obtained by seismic receivers, and that because the seismic receivers gather data based on actual physical measurements, the seismic traces that are processed are always representative of actual physically sensed data and cannot be data that are created mathematically. Applicant argues that the rejection of the claims under 35 USC 101 is therefore inappropriate.

This argument is not persuasive, as applicant has not claimed any steps relating to transforming the seismic data into something relating to physical and tangible objects. Applicant's process results in determination of parameters from the data, and the claims state that the parameters are converted into velocity and anellepticity laws for

processing the seismic traces. Applicant has not claimed what processing is performed on the seismic traces using these laws. Although the traces contain information that is relatable to the geometry and properties of the subsurface area, applicant has not claimed using the data to determine any of these properties or the geometry of the subsurface. Further, the data in applicant's claims need only to have been obtained from seismic sensors at some point in time. The data itself could simply be numerical data taken from a database that was created after a physical survey was made, regardless of when this survey was made.

Applicant has not claimed any of the physical or tangible properties of the underground formation in the processing steps of the method. Instead, the method steps simply recite determining parameters for processing seismic traces and then processing the traces in view of velocity and anellepticity laws. Applicant does not claim what is involved in this processing or what the result of the processing of the traces is.

The process claims therefore do not meet the machine or transformation test of *Bilski*. Although applicant claims that the traces are obtained from seismic receivers, the receivers are not positively claimed and are not used in the processing steps claimed for processing the data. Therefore, the processing steps are not tied to a particular machine or apparatus as no apparatus is recited which performs the processing steps. The claims do not meet the transformation prong of the test, as the result of the processing steps is determined parameters and laws, and a step of processing the traces without any details of what this processing involves or what the result of the processing is. The seismic data in the claims is simply processed, but

there is no recitation in the claims of any transformation of this data into a different state or thing. Although applicant argues that the data is representative of the physical properties of the subsurface, none of the processing steps relates to transforming the data into representations of these physical properties.

Claim Objections

Claims 15-19, 24 and 36-39 are objected to because of the following informalities:

The claims are labeled "withdrawn" and are non-elected, but none of the text of the claims is present. If the claims are withdrawn and not cancelled, the full text of the claims should be included in the claim set, as the claims are still pending.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-14, 20-23, 25-35, and 40-51 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Process claims 1-14, 20-23, 25-35, and 40-51 are not tied to a particular apparatus or machine and the claims do not transform a particular article to a different state or thing. The steps of the method claims are data processing steps that are not tied to any particular machine or apparatus and the data processing steps do not result

in the transformation of a particular article to a different state or thing. Therefore, the process claims are not directed to statutory subject matter.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SCOTT A. HUGHES whose telephone number is (571)272-6983. The examiner can normally be reached on M-F 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on (571) 272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Scott A. Hughes/
Primary Examiner, Art Unit 3663